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PATENT COOPERATION TREATY

| From the: INTERNATIONAL SEARCHING AUTHORITY | | | | | | | |
|--|---|--|---|--|--|--|--|
| To: | | PCT | | | | | |
| Griffith Hack | | | 101 | | | | |
| GPO Box 1285K | | | ment orbiton of the | | | | |
| MELBOURNE VIC 3001 | | | TTEN OPINION OF THE NAL SEARCHING AUTHORITY | | | | |
| | | INTERNATIONAL SEARCHING AUTHORITT | | | | | |
| | | (PCT Rule 43bis.1) | | | | | |
| · | | Date of mailing (day/month/year) | 1 O FEB 2005 | | | | |
| Applicant's or agent's file reference | | FOR FURTHER ACTION See paragraph 2 below | | | | | |
| FP20892 AJFW | International Eliza data | | | | | | |
| International application No. PCT/AU2004/001765 | International filing date 15 December 2004 | | Priority date (day/month/year) 15 December 2003 | | | | |
| rnational Patent Classification (IPC) or b | | | 13 Described 2003 | | | | |
| Int. Cl. ⁷ F03C 1/053; F16H 21/20; F | | | | | | | |
| Applicant | | | | | | | |
| HYDROSTATIC DESIGN TECHNOLOGY PTY LTD et al | | | | | | | |
| This opinion contains indications relations | ing to the following ite | ems: | | | | | |
| Box No. I Basis of the opinion | _ | | | | | | |
| Box No. II Priority | | | | | | | |
| Box No. III Non-establishment of | of opinion with regard to | novelty, inventive step a | and industrial applicability | | | | |
| - | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Lack of unity of invention | | | | | | |
| | Reasoned statement under Rule 43 <i>bis</i> .1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | | | |
| Box No. VI Certain documents cited | | | | | | | |
| Box No. VII Certain defects in the international application | | | | | | | |
| Box No. VIII Certain observations on the international application | | | | | | | |
| 2. FURTHER ACTION | | | | | | | |
| | examination is made, thi | is opinion will be conside | ered to be a written opinion of the International | | | | |
| If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. | | | | | | | |
| If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form | | | | | | | |
| PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. | | | | | | | |
| 1 of fatalot options, see 1 of 11 of 11 of 12 of | | | | | | | |
| 3. For further details, see notes to Form PCT/ISA/220. | | | | | | | |
| Name and mailing address of the IPEA/AU | | Authorized Officer | | | | | |
| AUSTRALIAN PATENT OFFICE | | | | | | | |
| PO BOX 200, WODEN ACT 2606, AUSTRAL E-mail address: pct@ipaustralia.gov.au | . AI. | ASANKA PERERA | | | | | |
| Facsimile No. (02) 6285 3929 | | Telephone No. (02) 6283 2373 | | | | | |

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2004/001765

| Bo | k No. I | Basis of the opinion | | | | | | | |
|----|------------|--|--|--|--|--|--|--|--|
| I. | | d to the language, this opinion has been established on the basis of the international application in the language in as filed, unless otherwise indicated under this item. | | | | | | | |
| | the fo | opinion has been established on the basis of a translation from the original language into llowing language, which is the language of a translation furnished for the purposes of ational search (under Rules 12.3 and 23.1(b)). | | | | | | | |
| 2. | | With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of: | | | | | | | |
| | a. type of | material | | | | | | | |
| | a | sequence listing | | | | | | | |
| | <u> </u> | able(s) related to the sequence listing | | | | | | | |
| | b. format | of material | | | | | | | |
| | i | n written format | | | | | | | |
| | i | a computer readable form | | | | | | | |
| | c. time of | filing/furnishing | | | | | | | |
| | □ c | ontained in the international application as filed. | | | | | | | |
| | fi | iled together with the international application in computer readable form. | | | | | | | |
| | fi | urnished subsequently to this Authority for the purposes of search. | | | | | | | |
| 3. | filed o | ition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been or furnished, the required statements that the information in the subsequent or additional copies is identical to that application as filed or does not go beyond the application as filed, as appropriate, were furnished. | | | | | | | |
| 4. | Additional | comments: | | | | | | | |
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10/582961 AP3 Rec'd PCT/PTO 15 JUN 2008

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/AU2004/001765

| Box No. V | | | 43 <i>bis</i> .1(a)(i) with regard to novelt nations supporting such statemen | | |
|--------------|---------------------------|--------|--|-----|--|
| 1. Statement | | | | | |
| Nove | elty (N) | Claims | 1-16 | YES | |
| | | Claims | | NO | |
| Inve | ntive step (IS) | Claims | 4-14 | YES | |
| | | Claims | 1-3, 15, 16 | NO | |
| Indu | strial applicability (IA) | Claims | 1-16 | YES | |
| | | Claims | | NO | |
| | | | | | |

Citations and explanations:

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1: DE 3936649A1 D2: SU 1002611A D3: SU 1775007A3 D4: SU 1789750A1 D5: US 5588339A

<u>D6: JP 11190326A</u> <u>D7: DE 3711729A1</u> <u>D8: EP 0271456B1</u>

Inventive Step (IS)

Claims 1, 15, 16

D1, D4-D8 individually disclose fluid machines with adjustable crank throws. D1 and D4 in particular shows crankshafts supporting multiple piston/cylinder arrangement. Given this disclosure, a radial arrangement of such pistons and limiting such arrangements to specified angular spacings are considered non-inventive design variations within the common general knowledge of person skilled in the art.

Claims 2, 3

D2 teaches the use of spherical bearing in an adjustable stroke piston engine and thus in obvious combination with D1, this document renders the subject matter of claim 2 lacking an inventive step over the cited art.

D3 teaches an adjustable stroke piston pump with the stoke being adjustable between zero to a maximum and thus in obvious combination with D1, this document renders the subject matter of claim 3 lacking an inventive step over the cited art.